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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,838	12/15/2005	Daisuke Kanenari	OGW-0407	3726

7590 08/06/2009
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EXAMINER

KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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08/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/560,838	Applicant(s) KANENARI, DAISUKE	
	Examiner Geoffrey L. Knable	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 2, 5 and 12-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The last clause of claim 1 has been amended to define that the drum is heated "at a maximum temperature" of 40-60 degrees C. This language is now read as simply defining an upper limit on the heating temperature whereas it is not seen where the original disclosure describes the invention in this manner. This therefore is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is new matter. Note that the original disclosure does not define or describe heating to a "maximum" temperature of 40-60 degree C.

The requirement of new claim 14 likewise does not find descriptive support in the original disclosure and therefore is subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is new matter. The original disclosure does not characterize vulcanization relative to the maximum temperature range.

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3. Claims 1, 2, 5 and 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 as amended, it is not clear what is meant by heating to a "maximum temperature". As noted above, this would normally be read as only defining an upper limit on the heating, not a range to which the heating is effected. As it seems that this may not be applicant's intent, the scope of the claim is indefinite and confusing in this regard.

4. Claims 1, 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caretta et al. (US 6,409,959) taken in view of Kaido et al. (US 6,136,123) and at least one of [Hashimura et al. (US 2002/0033557) and the admitted state of the prior art].

These references are applied for substantially the same reasons as set forth in the last office action. Note that claim 1 now simply defines an upper/maximum limit on the heating, it being still considered that the ordinary artisan would have found it obvious to preheat to only a degree sufficient to enhance evaporation (and anything above ambient would be expected to speed the evaporation of the volatile solvents). Further, and with respect to new claim 14, the artisan would have been expected to understand that any heating at this stage should not initiate vulcanization as this would certainly have been expected to have a deleterious effect on the subsequent bonding and shaping operations.

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5. Claims 1, 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimura et al. (US 2002/0033557) taken in view of Caretta et al. (US 6,409,959) and Kaido et al. (US 6,136,123).

These references are applied for substantially the same reasons as set forth in the last office action. Note that claim 1 now simply defines an upper/maximum limit on the heating, it being still considered that the ordinary artisan would have found it obvious to preheat to only a degree sufficient to enhance evaporation, anything above ambient being expected to speed the evaporation. Further, it would have been understood that excessive heating would present dangers due to the flammable nature of many of the volatile solvents used. The particular temperature selected would have been dictated by the solvent used and the evaporation rate desired, a maximum temperature of 40-60 degrees C being obvious to enhance evaporation without undue dangers being imposed. Further, and with respect to new claim 14, the artisan would have been expected to understand that any heating at this stage should not initiate vulcanization or melting of the liner or other layers as this would certainly been expected to have a deleterious effect on the subsequent bonding and shaping operations.

6. Claims 2, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimura et al. (US 2002/0033557) taken in view of Caretta et al. (US 6,409,959) and Kaido et al. (US 6,136,123) as applied above, and further in view of Irie (US 4,468,267) as applied in the last office action.

7. Applicant's arguments filed 4/2/2009 have been fully considered but they are not persuasive.

With respect to Caretta '959, it is argued that this reference teaches prevulcanization of the primer at 80-150 degrees C, this higher than the claimed maximum temperature of 40-60 degrees C. This argument has been carefully considered but is unpersuasive. This 80-150 degrees C range is in reference to the temperature at which the prevulcanization is to take place and not the preheating temperature of the drum *to promote evaporation of the solvent* (col. 9, lines 13-22). Note that the solvent is described as of "high volatility" (col. 6, lines 53+), this further indicating to the artisan that the heat needed to significantly speed evaporation would not be expected to be a very high temperature. There is no indication in Caretta et al. that the temperature used to speed evaporation (col. 9, lines 13-22) should be the same as the temperature used for prevulcanization and in fact from col. 9, lines 48-61, the heating process to achieve prevulcanization is a separate and distinct heating during the tire manufacturing (i.e. during the addition of the various other tire layers). Further, since it would be undesirable to prematurely cure the liner/primer layer at this initial point in the process (from perspective of achieving an adequate bond between layers), assuring that the temperature is in fact lower than the prevulcanization temperature would have been obvious.

Although applicant stresses that the heating is not to promote evaporation, it is still not seen how the present claims exclude or distinguish an initial preheating for the purpose of promoting evaporation of a solvent based coating layer. Further, while the last two lines refer to a "high tackiness condition", this broad relative terminology does

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not patentably distinguish simply using an adhesive to promote adhesion between layers as suggested in the prior art.

With respect to Hashimura et al, it is argued that the 40-80 degree C range is in reference to a subsequent step. It is not disputed that Hashimura suggest a preferred range of 40-80 degrees C for the subsequent heating/shaping step (i.e. during pressurization of the bladder - e.g. paragraph [0014]) and it is not the examiner's position that the ordinary artisan would or should use this range of temperatures. Rather, it is again submitted that this range of temperatures would provide some insight to the ordinary artisan is selecting a suitable and effective temperature to preheat the drum to simply promote solvent evaporation. In other words, from the teachings of Hashimura, the ordinary artisan would have understood that any preliminary heating for promoting solvent evaporation should also not be higher than this range as otherwise, there would be a danger of effecting preliminary heat set and/or vulcanization. Values under the claimed maximum would therefore obvious to ensure faster evaporation while not prematurely influencing the properties of the liner (and not prematurely vulcanizing it either).

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey L. Knable/
Primary Examiner, Art Unit 1791

G. Knable
August 3, 2009